## **Claims**

1. Mobile electronic device, having a radio receiver (28), an amplifier (24) and an audio connector (20) for connecting to a headphone (2), wherein said audio connector (2) comprises at least one first contact and at least one second contact, wherein said first contact is connected to ground and to said radio receiver (28), and said second contact is connected to said amplifier (24), characterized by a band-pass filter component (26) interconnected between said first contact and said radio receiver (28).

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- 2. Mobile electronic device according to claim 1, wherein said band-pass filter component (26) comprises a capacitor (42) connected between said first contact and ground.
  - 3. Mobile electronic device according to claim 1, wherein said band-pass filter component (26) is an oscillating circuit composed of an inductor (22) and a capacitor (42).
  - 4. Mobile electronic device according to claim 3, wherein transmitted frequencies of the band-pass filter component (26) are within a radio frequency range, and suppressed frequencies comprise mobile phone frequencies and audio frequencies.
- 5. Mobile electronic device according to claim 2, wherein said capacitor (42) has a capacity between 10 pF and 100 pF.
  - 6. Mobile electronic device according to claim 1 wherein said device comprises a mobile telephone.
  - 7. Mobile electronic device according to claim 1, wherein said radio receiver (28) further comprises a television receiver.
  - 8. Mobile electronic device according to claim 1, further comprising a media player (30).
  - 9. Mobile electronic device according to claim 8, wherein said media player (30) includes a media recorder.
- 10. Mobile electronic device according to claim 1, wherein said audio connector comprises at least one third contact connected to a component of said electronic device.
  - 11. Mobile electronic device according to claim 6, wherein said third contact is connected to a

mobile phone component of said mobile electronic device, to provide a headset for the mobile phone within said mobile electronic device.

12. Mobile electronic device according to claim 10, wherein said third contact is connected to control components of said mobile electronic device, to provide a remote control functionality for the mobile electronic device.

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- 13. Mobile electronic device according to claim 1, further comprising a DC blocking capacitor (40) interconnected between said first contact and said radio receiver (28).
- 14. Mobile electronic device according to claim 3, wherein said capacitor (42) has a capacity between 10 pF and 100 pF.
- 15. Mobile electronic device according to claim 10, wherein said third contact is connected to a mobile phone component of said mobile electronic device, to provide a headset for the mobile phone within said mobile electronic device.
- 16. Mobile electronic device according to claim 11, wherein said third contact is connected to control components of said mobile electronic device, to provide a remote control functionality for the mobile electronic device.